

NEW SPECIES OF CARABIDÆ IN THE SUBFAMILY  
HARPALINÆ, CHIEFLY FROM WESTERN  
NORTH AMERICA

BY EDWIN C. VAN DYKE

*University of California, Berkeley, California*

(Continued from page 76)

***Pterostichus rufofemoralis*** Van Dyke, new species

Rather robust, somewhat flattened, black, with the base of first antennal segment, coxæ, trochanters and femora, except the apices, an orange-red, the head and prothorax smooth and shining, the elytra subopaque and alutaceous. Head large, considerably over one-half breadth of prothorax and slightly longer than broad; frontal grooves prominent; mandibles robust and of normal length; eyes large; antennæ moderately robust, extending slightly beyond the base of prothorax. Prothorax robust, as broad as long, slightly narrowed posteriorly, apex shallowly but evenly emarginate, base almost transverse, sides distinctly arcuate throughout, hind angles rounded; lateral margins moderate, reflexed and with well-marked flattened fossæ within, which broaden basally; disc convex, median longitudinal groove deeply impressed and almost complete, anterior transverse impression well defined, the posterior vague, basal impressions single, broad and deep posteriorly and coarsely irregularly punctured, a rounded tubercle to the outer side (in the paratype or second specimen this is less evident), the base not margined. Elytra three-fifths longer than head and prothorax combined, five-eighths as broad as long, elliptical; humeri well rounded, humeral angles absent; disc convex, striæ deeply impressed, complete, uniform throughout, finely rather closely punctured, intervals convex, slightly crenulate and vaguely rugose near middle; third with four shallow foveæ, the first about one-fourth distant from base, the second near the middle and the others closer together and not far from the apex; scutellar striæ rather long and on either side of the suture at base. Legs fairly robust; first segment of posterior tarsi obscurely grooved at base on either side; posterior trochanters of moderate size. Apex of prosternum not margined. Beneath, with the sides of head finely rugose, the lateral thoracic sclerites and sides of first two abdominal segments rather coarsely punctured, the median portion of body with the abdomen posteriorly smooth and shining. Length, 13 mm.; breadth, 5 mm.

Holotype, female (No. 1853, Mus. Calif. Acad. Sci.), and paratype female in my collection, captured on Iron Creek, sixty miles north of Nome, Alaska, August 23, 1913, by J. Aug. Kusche and by him kindly presented to me.

This interesting and most distinct species should be associated

with *Pterostichus punctatissimus* Rand. It has the same general facies, and is about the size of a small specimen of the latter. It is in general less robust, its head and prothorax smaller, the elytra more elliptical, the intervals regular, and the thighs a clear orange-red instead of black. The males will, no doubt, be found to have the elytra more shining.

*Pterostichus pacificus* Van Dyke, new species

Small, robust yet graceful, shining, head and prothorax black, elytra piceous brown, mouthparts, antennæ, legs, prothoracic epipleuræ and epipleuræ rufopiceous. Head rather large, slightly more than three-fifths as broad as prothorax; frontal grooves well impressed, non-punctate; mandibles of type usual in subgenus *Cryobius*; eyes moderately prominent (less convex than in *riparius*); antennæ rather slender, extending beyond hind angles of prothorax. Prothorax slightly broader than long; apex emarginate; anterior angles prominent, base slightly emarginate at middle; sides narrowly arcuate from apex to one-fourth distance from base, there sinuate and straight to hind angles which are right-angled; lateral margin well defined and markedly reflexed; disc convex, median longitudinal groove sharply defined and almost complete, anterior transverse impression vague, the posterior distinctly defined; basal impressions each a single flat-bottomed pit projecting forward along the inner margin, rugosely punctured at bottom, without distinct carina near hind angles, base with indistinct margin near angles. Elytra one-fifth longer than head and prothorax combined, three-fifths as broad as long; humeri distinct though rounded, the sides moderately arcuate and rounded to sutural angles as usual, the margin fine; disc convex, slightly flattened at middle; striæ clearly defined and complete, more deeply impressed basally and apically, punctuation obscure, intervals flattened at middle, somewhat convex near base and apex; third stria with a well-defined fovea one-third distance from base and another one-fourth distance from apex, scutellar stria rather long and well impressed. Legs slender, first three segments of hind tarsi deeply grooved on outer sides. Apex of prosternum not margined. Beneath, with side pieces of meso and metathorax shallowly and sparsely punctured, the first and second abdominal segments also vaguely punctured at sides, elsewhere smooth and shining. Length, 9 mm.; breadth, 3.25 mm.

Holotype, male (No. 1854, Mus. Calif. Acad. Sci.), a unique in my collection, captured by myself near Hoquiam, Washington, May 27, 1914.

This species belongs in the subgenus *Cryobius* Chaud., and is related to *riparius*<sup>8</sup> and its associates *fatuus* and *pinguedineus*,

<sup>8</sup> See my notes concerning these in "The Coleoptera collected by the Katmai Expedition," Nat. Geograph. Soc. Contrib. Tech. Papers, Vol. II, No. 1 (1924), p. 9.

but it differs from these by having the prothorax more elongate, the anterior prothoracic angles more prominent, the sides posteriorly parallel for a considerable distance in front of the hind angles, the outer basal impression merged with the inner in one deep pit, not separate anteriorly as in those, the lateral margin of both prothorax and elytra more distinctly defined, the scutellar striæ longer, the punctures of the striæ almost obliterated, and the antennæ and legs longer and more delicate. The shape of the beetle, especially that of the prothorax and elytra, strongly suggests some of the species of *Bembidium* like *funereum* and *mæklini*.

#### *Anilloferonia* Van Dyke, new genus

Body elongate, moderately flattened and parallel. Head moderate in size, somewhat constricted behind; eyes wanting; genæ slightly prominent, two supra-orbital setæ; frontal grooves well developed; frontal suture distinct; clypeus prolonged beyond base of mandibles; mandibles porrect, without setæ in scrobes; antennæ arising under a distinct frontal ridge, well developed, the three basal segments glabrous, outer segments somewhat enlarged; submentum biemarginate and with well-defined tooth at middle; maxillæ with lacinia hooked at tip, the maxillary palpi of moderate length, the last segment elongate conical, the penultimate about two-thirds length of preceding and obconical; ligula of moderate size and bisetose at tip; labial palpi with the last two segments of about equal length, the penultimate bisetose in front. Prothorax with lateral setæ one-third distant from anterior angles and others within posterior angles. Body not pedunculate. Elytra narrowly inflexed, margin interrupted posteriorly and with evident internal plica, disc without dorsal punctures. Apterous. Prosternum not prolonged at tip and not margined at apex. Mesosternum almost vertical in front and rather widely separating the coxæ, the epimera narrow, yet wider internally. Metasternum well developed, the episterna about a third longer than broad, the epimera almost one-half the width of the former; posterior coxæ contiguous. Legs well developed, femoræ not greatly enlarged, posterior trochanters large and somewhat elliptical in shape; anterior tibiæ deeply emarginate within and with inner spurs at summit of emarginations.

Genotype: *Anilloferonia testacea* Van Dyke, new species.

This genus, according to the characters, should be placed in the tribe Pterostichini as constituted by Horn,<sup>9</sup> and close to the genus *Pterostichus*. It differs primarily from that by its having

<sup>9</sup> "On the Genera of Carabidæ, with special reference to the fauna of Boreal America," by George H. Horn, Trans. Am. Ent. Soc., Vol. IX (1881), p. 136.

no vestige whatever of eyes and by the outer segments of the maxillary palpi being differently proportioned. Superficially, it looks like a diminutive specimen of one of the species close to *angustus* or like a giant *Anillus*, particularly as regards the shape of the head.

#### *Anilloferonia testacea* Van Dyke, new species

Testaceous. Head one-third longer than broad, one-third as broad as prothorax, smooth and shining; antennæ extending slightly beyond posterior thoracic angles. Prothorax about as wide as long, apex and base feebly emarginate; sides feebly arcuate for anterior half, straight and slightly convergent posteriorly; hind angles barely obtuse, lateral margin fine; disc slightly convex anteriorly, flattened in region of hind angles; median longitudinal groove distinct, yet fine and almost complete; anterior transverse impression indicated only by series of small black spots; posterior impression vague; basal impressions single, not well defined; basal area obscurely punctate; basal margin only faintly indicated at middle. Elytra almost a third longer than head and prothorax combined, a third longer than broad, elongate elliptical; humeri rounded; lateral margin fine; disc feebly convex, flattened at center; striæ nine in number, fine yet complete, very finely and not closely punctured, the eighth with five well-marked foveæ near humeri and five near apex, the seventh with one fovea near apex, the intervals flat and without punctures; scutellar striæ wanting. Beneath smooth and shining, except side pieces of meso and metathorax and first two abdominal segments which are obscurely punctate-rugose. Length, 5.5 mm.; breadth, 2 mm.

Holotype, female (No. 1855, Mus. Calif. Acad. Sci.), a unique captured by myself in the Yakima Indian Forest Reserve on the east side of Mount Adams, Washington, at an altitude of about 4000 feet, July 1, 1925. It was found beneath an old log in the forest.

This and two species of *Anillus* are the only completely eyeless Carabidæ which have been found on the Pacific Coast.

#### *Evarthrus montanus* Van Dyke, new species

Elongate, robust, black, head and prothorax somewhat shining, elytra subopaque, slightly more pronounced in female. Head large, almost four-fifths breadth of prothorax; frontal grooves well marked; eyes prominent; mandibles robust and projecting; antennæ extending a couple of segments beyond hind angles of prothorax. Prothorax about 1 mm. broader than long, apex feebly emarginate, base more distinctly so and about equal in breadth to apex; sides slightly arcuate and convergent posteriorly until near hind angles where

they become gradually sinuate, then straight to the angles which are well defined, slightly obtuse and blunt at apex; lateral margin well defined, rather narrow in front but gradually broader posteriorly; disc convex, with series of fine transverse rugæ near middle; median longitudinal groove linear and well impressed, almost complete posteriorly and ending abruptly anteriorly at transverse impression; anterior transverse impression sharply defined and complete, the posterior not definable; basal impressions double, the inner deep and broad and each with a faint fovea on inner margin, the outer likewise deep but more linear, with a fairly well-defined carina to the outer side of it. Elytra 2 mm. longer than head and prothorax combined, one-sixth broader than prothorax and over two-thirds longer than broad; humeri pronounced though rounded; sides moderately arcuate and distinctly but shallowly sinuate before apex, disc convex though slightly flattened toward base; striæ complete, well impressed anteriorly, less so posteriorly, finely rather closely and distinctly punctured anteriorly, the punctures gradually disappearing toward apex; intervals somewhat flattened, the third with a single fovea back of middle and close to second stria, the seventh distinctly elevated at base; scutellar striæ vaguely defined at base of second interval. Legs moderately robust, hind tarsi without lateral grooves externally. Prosternum deeply grooved and not margined at apex. Beneath moderately smooth and shining. Length, 18 mm.; breadth, 6.5 mm.

Holotype, male (No. 1856), allotype, female (No. 1857, Mus. Calif. Acad. Sci.), and several paratypes in my collection, captured by myself in the valley at the base of the Black Mountains, North Carolina, during July, 1902. I have a series of seventeen specimens. It was not uncommon, and both Mr. William Beutenmueller, my traveling companion, and I took them frequently. The females are often much broader and more robust than the males. A pair of paratypes will be deposited in the United States National Museum at Washington, D. C.

This is a form that is characteristic of the mountains. I have always associated it with *Evarthrus sigillatus* Say, which, though found on both sides of the Alleghanies, is generally more northern in distribution. I believe that it is derived from the same common stock, but it is markedly different in appearance, even when viewed superficially, for it is considerably larger and more elongate, the prothorax especially so. The prothorax is also more flattened basally, the sides distinctly though gradually sinuate posteriorly, the hind angles definitely angulated, and the basal impressions less separated. The elytra are more

elongate, more flattened basally and, as a rule, with the striæ more impressed anteriorly.

*Evarthrus vagans alabamæ* Van Dyke, new subspecies

This name I am proposing for a very distinct phase of the species which is characterized by being of large size, 17 mm. long by 7 mm. in breadth, resembling in this regard the larger phase generally known as *engelmanni*, and differing from this primarily by having the sides of the prothorax evenly arcuate to hind angles, not at all sinuate posteriorly, the hind angles as a result very obtuse, the lateral margin more broadly expanded posteriorly, the basal impressions more distinctly separated, and the carinæ near the hind angles short and rather poorly defined, not long and conspicuous as in the other.

Holotype, male (No. 1858), allotype, female (No. 1859, Mus. Calif. Acad. Sci.), and five paratypes in my collection, all captured near Mobile, Alabama, by Mr. H. P. Loding. Two other specimens, one from Shreveport, Louisiana, and the other from Hart, Louisiana, agree with these.

*Evarthrus lodingi* Van Dyke, new species

Large, elongate, robust, black, rather shining throughout. Head two-thirds as broad as prothorax, somewhat elongate; frontal grooves deeply impressed; frontal suture distinct but fine; eyes prominent; mandibles robust, elongated. Prothorax over 1 mm. broader than long, apex feebly emarginate; base slightly narrower than apex, emarginate, narrowly margined close to angles; sides rather broadly arcuate and convergent posteriorly until close to base, where they become abruptly sinuate, then oblique to hind angles, which are well defined though rounded; lateral margin fine, uniform and well reflexed; disc moderately convex, smooth; median longitudinal groove fine, distinctly impressed, extending from apex to near base and with small foveate enlargement near apex and a very large and deep one near base; transverse impressions not defined; basal impressions treble, a deep foveate inner one, a deep, long linear median one, well separated from the first, and an oblique shorter linear outer one joining basally with the second, a well-defined carina at the outer side of the last. Elytra one-fourth longer than head and prothorax combined, over 1 mm. broader than prothorax and five-twelfths longer than broad, subelliptical; humeri prominent but rounded; margin rather broad, sharp and distinctly sinuate near apex; disc moderately convex, striæ complete, very deeply impressed, finer apically, very finely closely punctured, the punctures gradually obliterated toward apex; scutellar stria long, deeply impressed and within base of first interval; intervals convex, the third with fovea

about one-third distant from apex, the seventh conspicuously elevated at base. Legs long yet robust, hind trochanters broad, flattened, and subacute at apex; hind tarsi without lateral grooves externally. Prosternum shallowly grooved and not margined at apex. Beneath smooth and shining. Length, 20 mm.; breadth, 7.5 mm.

Holotype, male (No. 1860, Mus. Calif. Acad. Sci.), in my collection, captured at Monte Sano, Madison County, Alabama, June 9-11, 1911, by Mr. H. P. Loding and by him very kindly presented to me. Other specimens are in Mr. Loding's collection. The species is named after the captor, a kind and generous friend who has done many favors for me and has contributed much toward making known the Coleopterous fauna of his region.

This very distinct and elegant species should, perhaps, be placed somewhere near *sodalis*. It is much like a giant phase of the latter, with the hind angles of the prothorax of about the same size but more rounded. Its size, graceful form, three series of distinct basal thoracic impressions, long deep scutellar striæ, deeply impressed striæ and convex intervals should set it well apart from all known species. According to the Leng catalogue and the works of Colonel Casey<sup>10</sup> this species would fall in the genus *Eumolops* Casey, but that genus is not founded upon any character of good generic value, therefore I feel that it should not be recognized.

#### *Platynus prognathus* Van Dyke, new species

Elongate, subparallel, flattened, nigropiceous, margins of prothorax, elytra, basal segments of antennæ, mouthparts, legs, and sides of abdomen testaceous. Head much elongated, with mandibles longer than prothorax and almost as broad; frontal impressions large, irregularly and shallowly impressed; clypeus bifoveate in front; eyes large and moderately convex; mandibles very long and sickle-shaped, as long as rest of head; antennæ long, terminal segments enlarged, the last three extending beyond base of prothorax. Prothorax one-fifth broader than long; apex feebly emarginate; base transverse and equal in breadth to apex, vaguely margined, sides arcuate for anterior half, straight and oblique posteriorly, the hind angles very obtuse and rounded and in advance of the basal margin; lateral margin of moderate width, slightly reflexed and with broad, shallow fossæ within posteriorly; disc slightly convex; median longitudinal groove distinctly impressed, the anterior transverse impression short but

<sup>10</sup> "Memoirs on the Coleoptera," by Thomas L. Casey, Vol. VIII (1918), p. 351.

deep, the posterior vague, the surface finely transversely rugose. Elytra over a third longer than head and prothorax combined, one-third broader than prothorax, over twice as long as broad, elongate elliptical; humeri well rounded; sides almost parallel, deeply sinuate posteriorly, the margin fine; disc quite flattened, striæ complete, deeply impressed, punctures very fine and obscure, intervals flattened, the second, fifth, and seventh somewhat broader; the narrower subconvex third with three punctures near the second stria, the anterior about at middle; scutellar stria rather long and well impressed. Legs of moderate length. Beneath rather smooth and shining.

Holotype, female (No. 1861, Mus. Calif. Acad. Sci.), in my collection, captured on St. Simon Island, Okefinokee Swamp, Georgia, April 27 to May 12, 1911, by Professor J. C. Bradley, and by him very kindly presented to me.

This anomalous species might be placed in the group with *cincticollis*, but is widely separated from that, as well as from all of our other species. Its elongate, parallel form, very long mandibles and somewhat clubbed antennæ give it an appearance all its own. Though this species would be classed as an *Anchomenus*, I consider that as but a subgenus at most of *Platynus*, in this regard following such able students of the Carabidæ as Ganglbauer<sup>11</sup> and Le Conte and Horn.

#### **Colpodes rufiventris** Van Dyke, new species

Moderately elongate, head and prothorax decidedly narrowed, flattened, nigropiceous, elytra somewhat darker, antennæ, mouthparts, legs, undersurface, and margins of elytra rufous with a slight piceous tinge; head and prothorax shining, elytra subopaque. Head about 1 mm. less in breadth than prothorax and about three-fifths as broad as long; frontal grooves fine; front flattened at outer side of grooves; eyes of but moderate size; mandibles long and prominent; antennæ long and delicate, extending almost to middle of elytra; submentum with simple tooth. Prothorax slightly broader than long, about one-half the breadth of elytra; apex slightly emarginate; frontal angles not prominent; base feebly arcuate, vaguely margined; sides evenly but shallowly arcuate from apex to base, the hind angles broadly rounded, the margin narrow, broader posteriorly and slightly reflexed; disc convex, with vague but fine transverse rugæ; longitudinal groove finely but distinctly impressed; anterior transverse impression well, though not sharply, impressed, the basal a shallow sulcus. Elytra a third longer than head and prothorax combined, a third longer than broad, elongate ovate, broadest back of middle; base deeply emarginate, the humeri as a result prominent, subangu-

<sup>11</sup> "Die Kafer von Mitteleuropa," by Ludwig Ganglbauer, Vol. I, p. 248.

late; lateral margin narrow in front, broader posteriorly; apices rounded; disc slightly convex, striæ finely impressed, without distinct punctures; scutellar stria very long; intervals flat, the third with an anterior very vague puncture near third stria, a vague puncture near second stria at middle and an evident puncture near second stria not far from apex. Legs rather long and delicate; anterior tibiæ shallowly grooved on outer face, middle and posterior deeply grooved on both outer and inner face posteriorly, with carinæ between; first and second segments of front tarsi shallowly grooved on both sides above; first three segments of middle and hind tarsi rather deeply grooved on both sides above; fourth segment of all tarsi narrowly bilobed posteriorly, with a slight tuft of pubescence beneath. Beneath rather smooth and shining. Length, 10.5 mm.; breadth, 4 mm.

Holotype, male (No. 1862, Mus. Calif. Acad. Sci.), in my collection, captured at an altitude of 6000 feet on Mount Washington, near Nogales, Arizona, July 10, 1919, by Mr. J. Aug. Kusche, and by him kindly presented to me.

This, the second species of *Colpodes* to be described from our fauna, differs from *Colpodes longiceps* Schfr., also from Arizona, markedly in color as in other features. It does not agree either with the descriptions of any of the known Mexican species. Except for the rather wide margin of the prothorax, this species might fall in the genus *Glyptolenus* Bates, because of the tibial and tarsal characters, but these are quite variable within the genus *Colpodes*, therefore not reliable for establishing a group of more than subgeneric rank at most. The genus *Colpodes* is sometimes placed as but a subgenus of *Platynus*, but I think that though the character used for its separation, the deeply emarginate or bilobed fourth tarsal segment, is not a very marked one; it is sufficiently definite, especially when taken in connection with other characters and backed by the fact that the genus as a whole is more or less arboreal and generally restricted to the warmer parts of the world, whereas almost all of *Platynus* are strictly terrestrial and confined to the temperate regions.

#### *Pseudaptinus oviceps* Van Dyke, new species

Elongate, depressed, pubescent, rufotestaceous, antennæ, palpi, and legs testaceous. Head elongate oval, one-fourth longer than broad and three-fourths as broad as prothorax; finely sparsely punctate, rather shining; frontal impressions well marked, rather broad; eyes small, but slightly convex and hardly projecting beyond the even

curve of the side of the head; mandibles prominent, prognathous; antennæ long and slender, extending several segments beyond the base of the prothorax. Prothorax a little longer than wide, broadest near apex; apex very shallowly emarginate; base slightly arcuate, about one-half breadth of widest portion; sides broadly rounded near anterior angles, oblique and convergent to posterior third, then subparallel to hind angles which are right-angled but not prominent; disc moderately convex, somewhat coarsely and sparsely punctured; median longitudinal groove distinctly impressed; anterior transverse impression well defined, posterior vague; basal impressions long and shallow. Elytra oblong elongate, humeri broadly rounded, apex truncate, outer angles rounded, disc flattened; striæ finely impressed, complete; intervals flat, finely and densely punctured, somewhat rugose toward base. Legs long and delicate. Prosternum sparsely and coarsely punctured, smooth at sides, meso and metapleuræ coarsely closely punctured, the abdomen very finely punctured. Length, 6 mm.; breadth, 2 mm.

Holotype, female (No. 1863, Mus. Calif. Acad. Sci.), in my collection, captured by myself about 1889, under a stone near the Los Angeles River, California, in what is now Griffith Park.

This species in size and general appearance looks very much like *Pseudaptinus tenuicollis* (Lec.), but its ovate and narrower head, small eyes, and prominent mandibles separate it very decidedly from that as well as from *Pseudaptinus lecontei* (Dej.).

#### ***Thalpius microcephalus* Van Dyke, new species**

Elongate, depressed, pubescent, rufotestaceous, antennæ, palpi, and legs testaceous. Head elongate, one-fourth longer than broad and narrower than prothorax, moderately coarsely, sparsely punctured, somewhat shining; frontal impressions shallow, poorly defined; eyes rather small, not projecting laterally beyond sides of head; mandibles of usual size; antennæ of moderate length, extending somewhat beyond base of prothorax, segments four to ten oblong. Prothorax about as long as wide, broadest one-third distance from apex; apex slightly emarginate, anterior angles projecting forward somewhat (much more evident than in *horni*); base pedunculate as usual; sides shallowly arcuate anteriorly, oblique and sinuate posteriorly, hind angles acute; disc slightly convex, flattened medially, coarsely, moderately closely punctured; median longitudinal groove sharply impressed; anterior transverse impression well defined, posterior vaguely marked; basal impressions of moderate length, shallow. Elytra oblong, elongate; humeri broadly rounded; apex truncate, outer angles rounded; disc flattened; striæ shallowly impressed, not distinctly defined, especially posteriorly; intervals flat, rather coarsely and irregularly punctured. Legs moderately long. Body beneath coarsely,

rather regularly punctured anteriorly, abdomen more finely punctured. Length 4.75 mm.; breadth, 1.75 mm.

Holotype, a unique female (No. 1864, Mus. Calif. Acad. Sci.), in my collection, secured by myself from beneath a stone on the hills in Griffith Park, Los Angeles, California, January 12, 1912.

This species has the same general body proportions as *Thalpius horni* Chd., but it is much smaller. Its narrow head, less prominent eyes and poorly defined elytral striæ also serve to distinguish it from that as from all other species. In color, it resembles *rufulus*, but it is smaller and has a narrower prothorax in addition to the characters just mentioned.

In this connection I wish to state that in Southeastern California specimens of *Thalpius horni* Chd., which are entirely rufous, are not uncommon.

#### *Harpalus washingtoniensis* Van Dyke, new species

Robust, black or slightly brownish. Elytra piceous brown, antennæ, mouthparts and legs piceotestaceous, tarsi darker, very shining, elytra of females duller. Head large, over two-thirds breadth of prothorax, smooth and shining; frontal suture deeply impressed; eyes moderately prominent; mandibles well developed; antennæ reaching to hind angles of prothorax. Prothorax almost a third broader than long; apex and base slightly emarginate, the latter as broad as apex and distinctly and completely margined; sides moderately and evenly arcuate from anterior angles to posterior fourth, then sinuate and convergent to hind angles, which are obtuse, almost right-angled, and sharp at apex; lateral margin fine; disc convex, median longitudinal groove distinctly impressed; anterior transverse impression distinct, posterior vague, basal impressions deep; surface smooth and shining, basal area irregularly punctured, more definitely so in and about basal impressions. Elytra over one-fifth longer than head and prothorax combined, two-fifths longer than broad; humeri rounded; sides slightly arcuate, markedly excised near apex, margin fine; disc decidedly convex, striæ well impressed; scutellar stria rather long; intervals flattened, somewhat convex basally in males. Legs robust. Beneath finely, sparsely and rather indistinctly punctured in front, the abdomen smooth and shining, except for sides of first and base of second segment which are slightly punctured. Length, 8.5 mm.; breadth, 3.25 mm.

Holotype, male (No. 1865), allotype, female (No. 1866, Mus. Calif. Acad. Sci.), and numerous paratypes in my collection, captured by myself at Port Angeles, Washington, May 26, 1907. In my series of thirty-two mounted specimens, I have

them from the following additional localities: Nanaimo, British Columbia; Monroe, Lake Quinault, Seattle, The Forks, Northbend, and Orcus Island, Washington; and Marshfield, Oregon. A pair of paratypes will be deposited in the entomological collection of the U. S. National Museum, Washington, D. C.

This species varies considerably in size, ranging in length from 7 to 10 mm., the females are, as a rule, larger than the males, and somewhat paler in color, the epipleuræ often lighter, while in a few cases the legs are quite piceous. It belongs in association with *Harpalus spadiceus* Dej. and *Harpalus carolinæ* Schaeffer, differing primarily from the former by having the prothorax more sinuate posteriorly and the hind angles almost right and sharply defined, and from the latter by having the legs yellowish or testaceous, the general body color, especially the elytra, more brownish, the basal impressions of the prothorax more broadly impressed, the basal area itself definitely punctate, the elytral margin more acutely excised posteriorly, and by being as a whole somewhat smaller and less elongate.

#### *Harpalus martini* Van Dyke, new species

Robust, elongate, subparallel, black, antennæ, tibiæ, and tarsi somewhat piceotestaceous, very shining above in the male, the female quite opaque. Head large, two-thirds breadth of prothorax; frontal suture very fine, not impressed; eyes moderately prominent; mandibles well developed; antennæ reaching to hind angles of prothorax. Prothorax over a third broader than long; apex distinctly emarginate, the anterior angles slightly prominent; base also distinctly emarginate, completely margined and broader than apex; sides very shallowly arcuate, almost subparallel from anterior angles to posterior fourth, thence sinuate and divergent to posterior angles, which are almost right-angled and slightly rounded at apex; lateral margin fine; disc convex, median longitudinal groove very fine, anterior and posterior transverse impressions both vague, basal impressions broadly and shallowly impressed; posterior angles much flattened; basal area irregularly punctured, especially about basal impressions. Elytra one-fifth longer than head and prothorax combined and one-fifth longer than broad; humeral angles distinctly dentate; sides slightly arcuate, almost parallel, shallowly excised near apex, margin fine; disc convex, striæ finely impressed; scutellar stria rather long; intervals flat. Legs robust. Under surface subopaque anteriorly; abdomen posteriorly smooth and shining in male, subopaque in female; an oblique area on second and third abdominal segments, immediately beneath hind femora, finely punctate and with short hairs arising from each puncture. Length, 10 mm.; breadth, 3.75 mm.

Holotype, male (No. 1867), and allotype, female (No. 1868, Mus. Calif. Acad. Sci.), collected at Bear Lake, San Bernardino Mountains, California, May 5, 1919, by Mr. J. O. Martin, and kindly presented to me. Four paratypes are in Mr. Martin's collection. This species is named after Mr. Martin, an excellent collector, in consideration of many favors.

The species is probably related to *Harpalus somnulentus* Dej., but is decidedly darker. Its color and general shape also suggest *Harpalus cautus* Dej. Its peculiarly shaped prothorax, with base broader than apex, sides subparallel, sinuate and divergent posteriorly, and the well-marked humeral dentations of the elytra should, however, readily serve to separate it from the above and from all of our other species.

#### *Dicheirus blaisdelli* Van Dyke, new species

Robust, very convex; head and prothorax rufo-piceous, elytra black, legs rufous; clothed above with long erect hair, the sternal and midventral region as well as the legs also very pilose, the hair in the main shorter than above. Head very coarsely, moderately densely and closely punctured, antennæ about reaching hind angles of prothorax. Prothorax distinctly broader than long, 3.5 mm. by 3 mm., emarginate at apex, transverse at base, the latter 2.5 mm. wide, sides broadly rounded in front, straight and convergent posteriorly, just perceptibly sinuate in front of hind angles, the hind angles obtuse and distinct, not rounded, the disc convex, coarsely deeply and rather sparsely punctured. Elytra over one-third longer than broad, .5 mm. broader than prothorax, sides hardly arcuate, evenly rounded at apex, posterior sinuation faint; disc very convex, striæ distinctly impressed, impunctate, intervals flat and shining, sparsely irregularly biserially punctured, deeper toward base, very finely near apex. Prosternum coarsely moderately closely punctured, propleuræ finely sparsely and rather indistinctly punctured, the meso- and meta-pleuræ more distinctly punctured and somewhat rugose, the abdomen finely and closely punctured at middle in front, very finely and sparsely at middle behind, with sides impunctate. Legs robust, spines of anterior tibiæ trifid, of posterior slender and acute. Length, 11 mm.; breadth, 4 mm.

Holotype female (No. 1869, Mus. Calif. Acad. Sci.), and three paratype females in the collection of Dr. F. E. Blaisdell, captured by Dr. Blaisdell at Poway, San Diego County, California.

This robust species in both structure and appearance stands midway between *Dicheirus strenuus* (Horn) and *Dicheirus angularis* Casey. It is separated from the former by being smaller

and by having the propleuræ somewhat punctured and from the latter by being far more convex and robust, as well as by having the hind angles of the prothorax more obtuse. From *dilatatus*, it can always be separated not only by its robustness, but by having non-rounded hind angles to prothorax and by having longer pile. The elytra of *blaisdelli* simulate very closely those of a female *Plastocerus agassizi* Lec. The genus *Dicheirus* Mann. is one of the few which might, with benefit, be kept separate from the genus *Anisodactylus* Dej.

---

#### HABITS OF TRACHYKELE NIMBOSA Fall

While on Mt. Hood, Oregon, during the latter part of June, I noticed that the rare buprestid, *Trachykele nimbosa* Fall, could often be found ovipositing in the blazes made by the surveyors in fir trees, *Abies*, along the right-of-way for a forest road. These beetles are rather silent in flight, as is the case with the *Acmaødera*, and as a result they alight without attracting much attention. Unfortunately, they also depart with as great ease, simply vanish before you. This is particularly the case during the heat of the day. If the weather becomes cooler while they are in evidence, they may readily be approached and even picked up with the fingers.

*Trachykele opulenta* Fall, a brilliant green species, which breeds normally in the native cypress, *Cupressus sargentii* Jepson, on Cypress Ridge, Marin County, California, has been found this last year to have come down into the valleys and attacked the planted Monterey cypress, *Cupressus macrocarpa* Hartw. As pointed out by Dr. H. E. Burke, this species only attacks the dead limbs of living trees, the larvæ gradually working into the main trunk of the tree which they in time honeycomb.—E. C. Van Dyke.

---

#### HABITS OF CYMATODERA DECIPIENS FALL

During the summer of 1925, several *Cymatodera dicipiens* Fall emerged from twigs of *Pinus ponderosa* collected during the winter of 1923 on Mt. Wilson, Los Angeles County, California. During the spring and summer of 1924 and 1925, the only other insects to emerge from these twigs were an undescribed species of *Carphoborus* which came out in some numbers. It seems from this that the latter insect, in the larval stage, is preyed upon by the *Cymatodera* larvæ.—Alonzo C. Davis.